

HALLIBURTON DRILLING SYSTEMS

Page 1

Survey Report

Date: 11/17/97

Time: 7:15 am

Wellpath ID: SURVEY

Date Created: 11/11/97

Last Revision: 11/17/97

*Calculated using the Minimum Curvature Method**Computed using WIN-CADDS REV2.2.2*

Vertical Section Plane: S 70.20 W

Survey Reference: WELLHEAD

Reference World Coordinates: Lat. 32.49.00 N - Long. 103.54.00 W

Reference GRID System: UTM Zone: 13, Cent. Merid: 105.00.00 W

Reference GRID Coordinates: (m): 3631553.94 N 602976.52 E

North Aligned To: TRUE NORTH

Offset, Reference To WellHead: (ft): 0.00 N 0.00 E 0.00 TVD

Vertical Section Reference: WELLHEAD

Closure Reference: WELLHEAD

TVD Reference: KB

WISER OIL COMPANY
 SKELLY UNIT #400
 SEC.21-T17S-R31E
 EDDY COUNTY, NEW MEXICO

RECEIVED
 ARTESIA

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft)		DLS (dg/100ft)
ASSUME VERTICAL TO BOTTOM OF CASING								
460.00	0.00	N 0.00 E	0.00	460.00	0.00	0.00 N	0.00 E	0.00
516.00	0.50	S 74.20 W	56.00	516.00	0.24	0.07 S	0.24W	0.89
599.00	1.20	N 31.20 W	83.00	598.99	0.78	0.58 N	1.03W	1.41
682.00	1.70	N 37.60 W	83.00	681.96	1.32	2.30 N	2.24W	0.63
765.00	0.40	N 79.60 W	83.00	764.95	1.95	3.32 N	3.27W	1.72
848.00	0.50	S 77.50 W	83.00	847.95	2.56	3.30 N	3.91W	0.25
931.00	0.60	S 77.70 W	83.00	930.94	3.35	3.13 N	4.69W	0.12
1014.00	0.10	S 21.40 W	83.00	1013.94	3.83	2.97 N	5.14W	0.66
1069.00	0.70	N 0.90 E	55.00	1068.94	3.74	3.26 N	5.15W	1.44
BHA#1 BIT#3-F27 IN:1075 6.5"SS X 1.25° BH								
1163.00	2.10	N 55.40 W	94.00	1162.91	4.54	4.81 N	6.56W	1.92
1258.00	3.50	N 89.80 W	95.00	1257.80	8.28	5.81 N	10.89W	2.24
1352.00	4.00	S 74.60 W	94.00	1351.60	14.25	4.95 N	16.92W	1.20
1443.00	5.20	S 67.10 W	91.00	1442.31	21.53	2.50 N	23.78W	1.47
1536.00	6.80	S 65.90 W	93.00	1534.80	31.23	1.39 S	32.69W	1.73
1631.00	8.80	S 67.20 W	95.00	1628.91	44.09	6.50 S	44.53W	2.11
1726.00	9.10	S 68.90 W	95.00	1722.76	58.86	12.02 S	58.23W	0.42
1819.00	10.30	S 69.40 W	93.00	1814.43	74.53	17.59 S	72.88W	1.29
1910.00	12.10	S 72.90 W	91.00	1903.69	92.19	23.26 S	89.61W	2.11
BHA#2 BIT#3RR-F27 IN:1969 6.5"SS X 1.25° BH								
2004.00	12.00	S 68.40 W	94.00	1995.62	111.80	29.76 S	108.11W	1.00
2097.00	13.80	S 66.30 W	93.00	2086.27	132.53	37.77 S	127.26W	2.00
2191.00	12.30	S 65.70 W	94.00	2177.84	153.70	46.40 S	146.65W	1.60
2286.00	12.10	S 68.30 W	95.00	2270.70	173.74	54.25 S	165.13W	0.62

HALLIBURTON DRILLING SYSTEMS

Page 2

Date: 11/17/97

Survey Report

Wellpath ID: SURVEY

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft)		DLS (dg/100ft)
2379.00	11.00	S 68.20 W	93.00	2361.81	192.35	61.15 S	182.42W	1.18
2474.00	10.00	S 64.30 W	95.00	2455.22	209.61	68.09 S	198.27W	1.29
2569.00	8.00	S 70.80 W	95.00	2549.05	224.43	73.84 S	211.95W	2.36
BHA#3 BIT#3RR-F27 IN:2644 6.5"SS X 1.25" BH								
2661.00	6.80	S 73.80 W	92.00	2640.28	236.27	77.46 S	223.22W	1.37
2755.00	5.00	S 75.10 W	94.00	2733.78	245.90	80.07 S	232.53W	1.92
2850.00	3.00	S 86.40 W	95.00	2828.54	252.42	81.29 S	239.01W	2.25
2943.00	1.50	N 77.00 W	93.00	2921.47	255.78	81.17 S	242.62W	1.74
3035.00	0.60	S 49.10 W	92.00	3013.46	257.24	81.22 S	244.16W	1.35
3128.00	0.90	S 21.00 E	93.00	3106.45	257.68	82.22 S	244.27W	0.96

HALLIBURTON DRILLING SYSTEMS

Page 1

Survey Report

Date: 11/19/97

Time: 7:13 am

Wellpath ID: SURVEY

Date Created: 11/11/97

Last Revision: 11/19/97

*Calculated using the Minimum Curvature Method**Computed using WIN-CADDS REV2.2.2*

Vertical Section Plane: 250.20 deg.

Survey Reference: WELLHEAD

Reference World Coordinates: Lat. 32.8167 N - Long. 103.9000 W

Reference GRID System: UTM Zone: 13, Cent. Merid: 105.00 W

Reference GRID Coordinates: (m): 3631553.94 N 602976.52 E

North Aligned To: TRUE NORTH

Offset, Reference To WellHead: (ft): 0.00 N 0.00 E 0.00 TVD

Vertical Section Reference: WELLHEAD

Closure Reference: WELLHEAD

TVD Reference: KB

WISER OIL COMPANY

SKELLY UNIT #400

SEC.21-T17S-R31E

EDDY COUNTY, NEW MEXICO

DMI STEERING TOOL. DECLINATION 9.3° EAST

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		DLS (dg/100ft)
3035.00	0.60	229.10	92.00	3013.46	257.24	81.22 S	244.16W	1.35
3128.00	0.90	159.00	93.00	3106.45	257.68	82.22 S	244.27W	0.96
BHA#4 BIT#3RR-F27 IN:3173 6.5"SS X 1.25° BH								
3222.00	3.90	117.80	94.00	3200.36	255.51	84.40 S	241.17W	3.49
3315.00	2.90	103.60	93.00	3293.20	251.41	86.42 S	236.09W	1.40
3407.00	0.60	87.10	92.00	3385.15	249.00	86.95 S	233.35W	2.53
3499.00	0.50	339.00	92.00	3477.15	248.55	86.55 S	233.01W	0.97
3593.00	0.70	329.70	94.00	3571.14	248.66	85.67 S	233.45W	0.24
3687.00	1.40	302.10	94.00	3665.13	249.48	84.56 S	234.71W	0.90